SUBJECT INDEX

Adhesive joints, pp. 298, 412
Analysis, p. 227
Angle-ply laminates, p. 32
Anisotropy, p. 456
Aramid filaments, p. 312
Average stress failure theory crack, p. 70
Beam vibration, p. 104
Biaxial loading, p. 216
Bolted joint, pp. 255, 279, 290, 432
Boron/aluminum, p. 595
Broken fibers, p. 153
CFRP beams, p. 104
CFRP plates, pp. 132, 508
Carbon/epoxy laminates, p. 21
Carbon fiber/epoxy, p. 96
Central crack, p. 122
Chrystotile asbestos, p. 412
Circular holes, p. 47
Composite laminates, p. 173
Computed tomography, p. 536
Crack-tip damage mechanisms, p. 574
Cross-ply, p. 339
Curing, pp. 357, 387
Cyclic shear fatigue, p. 2
Cyclic shear-fatigue fracture, p. 2
DCB fracture test, p. 574
Damage, p. 153
Damping, pp. 104, 132
Debonding, p. 153
Delamination, pp. 70, 495
Design, pp. 132, 255, 279, 298
Diffusion, p. 32
Dimensional stability, p. 173
Dynamic response, p. 200
Effective flaws, p. 239
Electromagnetic model, pp. 357, 387
Energy release rate, p. 227
Energy release rate and toughness, p. 574
Failure analysis, pp. 70, 216, 255, 279 290
Fatigue, pp. 21, 153
Fatigue damage accumulation, p. 2
Fatigue failure, pp. 47, 412
Filament wound shafts, p. 298
Finite element, pp. 188, 200, 227, 595
Fourie series, p. 200
Fracture, p. 595
Fracture mechanics, pp. 70, 122, 239, 420, 495, 508
Fracture toughness, p. 227
Frequencies, prediction/measurement, p. 132
Friction, p. 432
GFRP beams, p. 104
GFRP plates, p. 132
Glass/epoxy, p. 81
Glasswool, p. 557
Graphite/aluminum, p. 519
Graphite/epoxy composites, pp. 32, 173, 339, 447, 495, 545
Graphite/magnesium, p. 519
Hankinson formula, p. 216
Heat, p. 478
Hole size effect, p. 188
Homogeneous shear fatigue, p. 2
Homogeneous shear-fatigue damage, p. 2
Hysteresis, p. 519
Impact, p. 508
Inelastic, p. 464
Interaction parameter, p. 456
Interaction stress coefficient, p. 216
Interlaminar crack initiation and growth, p. 574
Interlaminar stresses, pp. 96, 188, 420, 574
Isotropic wave, pp. 357, 387
Kevlar/Epoxy, p. 595
Laminates, pp. 239, 339
Laminated, p. 200
Laminated plate, p. 58
Lightweight, p. 557
Linear coeff. of thermal expansion, p. 81
Matrix plasticity, p. 519
Metal matrix composites, p. 519
Microcracks, p. 173
Micromechanics, p. 595
Microwave, pp. 357, 387
Moduli, p. 104

SUBJECT INDEX

Adhesive joints, pp. 298, 412
Analysis, p. 227
Angle-ply laminates, p. 32
Anisotropy, p. 456
Aramid filaments, p. 312
Average stress failure theory crack, p. 70
Beam vibration, p. 104
Biaxial loading, p. 216
Bolted joint, pp. 255, 279, 290, 432
Boron/aluminum, p. 595
Broken fibers, p. 153
CFRP beams, p. 104
CFRP plates, pp. 132, 508
Carbon/epoxy laminates, p. 21
Carbon fiber/epoxy, p. 96
Central crack, p. 122
Chrystotile asbestos, p. 412
Circular holes, p. 47
Composite laminates, p. 173
Computed tomography, p. 536
Crack-tip damage mechanisms, p. 574
Cross-ply, p. 339
Curing, pp. 357, 387
Cyclic shear fatigue, p. 2
Cyclic shear-fatigue fracture, p. 2
DCB fracture test, p. 574
Damage, p. 153
Damping, pp. 104, 132
Debonding, p. 153
Delamination, pp. 70, 495
Design, pp. 132, 255, 279, 298
Diffusion, p. 32
Dimensional stability, p. 173
Dynamic response, p. 200
Effective flaws, p. 239
Electromagnetic model, pp. 357, 387
Energy release rate, p. 227
Energy release rate and toughness, p. 574
Failure analysis, pp. 70, 216, 255, 279 290
Fatigue, pp. 21, 153
Fatigue damage accumulation, p. 2
Fatigue failure, pp. 47, 412
Filament wound shafts, p. 298
Finite element, pp. 188, 200, 227, 595
Fourie series, p. 200
Fracture, p. 595
Fracture mechanics, pp. 70, 122, 239, 420, 495, 508
Fracture toughness, p. 227
Frequencies, prediction/measurement, p. 132
Friction, p. 432
GFRP beams, p. 104
GFRP plates, p. 132
Glass/epoxy, p. 81
Glasswool, p. 557
Graphite/aluminum, p. 519
Graphite/epoxy composites, pp. 32, 173, 339, 447, 495, 545
Graphite/magnesium, p. 519
Hankinson formula, p. 216
Heat, p. 478
Hole size effect, p. 188
Homogeneous shear fatigue, p. 2
Homogeneous shear-fatigue damage, p. 2
Hysteresis, p. 519
Impact, p. 508
Inelastic, p. 464
Interaction parameter, p. 456
Interaction stress coefficient, p. 216
Interlaminar crack initiation and growth, p. 574
Interlaminar stresses, pp. 96, 188, 420, 574
Isotropic wave, pp. 357, 387
Kevlar/Epoxy, p. 595
Laminates, pp. 239, 339
Laminated, p. 200
Laminated plate, p. 58
Lightweight, p. 557
Linear coeff. of thermal expansion, p. 81
Matrix plasticity, p. 519
Metal matrix composites, p. 519
Microcracks, p. 173
Micromechanics, p. 595
Microwave, pp. 357, 387
Moduli, p. 104

Moisture, p. 478
Moisture absorption, p. 32
NDE, pp. 536, 557
Nonlinear fracture analysis, p. 574
Optimum design, p. 58
Orthotropic composites, pp. 122, 432
Pin-loaded hole, pp. 432, 464
Plane-stress conditions, p. 216
Ply elasticity, p. 239
Ply orientation, p. 58
Poisson's ratio, p. 447
Post-curing, p. 81
Prohabilistic theory, p. 339
Random short fiber SMC composite, pp. 2, 574
Relative humidities, p. 32
Reliability evaluation, p. 21
Residual strength, p. 508
Residual stresses, pp. 32, 81
Shear-lag, p. 595
Shell of revolution, p. 200
Simulations, p. 239
Shear-fatigue degradation, p. 2
Singular stresses, p. 420
Stiffness, p. 153
Stochastic processes, p. 239
Strain gages, p. 81
Strength, pp. 255, 290, 339, 456, 464, 545
Stresses, pp. 70, 227, 432, 495
Stress concentration, p. 595
Stress intensity factor, p. 122
Symmetric composites, p. 104
Tension-tension fatigue, p. 21
Tensor polynomial, p. 456
Thermal cycling, p. 519
Thermal expansion, pp. 96, 173
Thermal loading, p. 122
Thermal residual stresses, p. 519
Thermal strain, p. 519
Thermochemical model, pp. 357, 387
Thermoelastic, p. 81
Thick laminates, p. 81
Torsion, p. 298
Transport coupling, p. 478
Transverse cracks, p. 239
Tsai-Wu theory, p. 216
Test methods, p. 227
Unidirectional laminates, p. 21
Unnotched laminates, p. 21
Variability, p. 312
Vibration, pp. 104, 132
Weakest link, p. 312
Weibull distribution, p. 312
X-ray, p. 536

AUTHOR INDEX

Adams, R. D., pp. 104, 132
Baumann, K. J., p. 536
Adibhatla, S., p. 58
Blikstad, M., p. 32
Bowles, D. E., p. 173
Caprino, G., p. 508
Carlsson, L., p. 495
Chang, F. K., pp. 255, 279, 290, 464
Chou, P. C., p. 239
Chou, T. W., p. 339
Corten, H. T., p. 2
Delale, F., p. 420
Fukunaga, H., p. 339
Gustavsson, A., p. 495
Ericson, K., p. 495
Greif, S., p. 200
Goetz, D. P., p. 2
Hoa, S. V., p. 188
Herakovich, p. 447
Herbert, D. L., p. 536
Hipol, P. J., pp. 298, 357, 387
Imanoka, M., p. 412
Järvelä, P., p. 557
Johannesson, T. R., p. 32
Kim, R. Y., p. 70
Kennedy, W. H., p. 536
Kishimoto, W., p. 412
Kishore, N. N., p. 420

Kural, M. H., p. 519
Laitinen, K. W., p. 557
Lakshminarayana, H. V., p. 227
Lee, W. I., pp. 357, 387
Lei, S. C., p. 239
Lin, D. X., p. 132
Liu, J. Y., p. 216
Lucking, W. M., p. 188
Min, B. K., p. 519
Nakayama, H., p. 412
Nathenson, R. D., p. 81
Ni, R. G., pp. 104, 132
Okita, K., p. 412
Persson, L., p. 495
Peters, P. W. M., pp. 339, 545
Phoenix, S. L., p. 312
Piccarolo, S., p. 96
Purola, J. J., p. 557
Radhakrishnan, K., p. 21
Raghava, R. S., p. 81
Reedy, E. D., Jr., p. 595
Sankar, T. S., p. 188
Schulte, K., p. 339
Schwartz, P., p. 312
Scott, R. A., pp. 255, 279, 290, 464
Sheinman, I., p. 200
Shirato, M., p. 412
Sjöblom, P. O. W., p. 32
Soni, S. R., p. 70
Springer, G. S., pp. 255, 279, 290, 464
Stachurski, Z., p. 456
Steif, P. S., p. 153
Suemasu, H., p. 574
Tambour, Y., p. 478
Tauchert, T. R., p. 58
Titomanlio, G., p. 96
Törmälä, P., p. 557
Tsai, Y. M., p. 122
Tsangarakis, N., p. 47
Ueng, C., p. 432
Valentich, J., p. 81
Wagner, H. D., p. 312
Wang, A. S. D., pp. 239, 420
Wang, S. S., pp. 2, 574
Wu, R., p. 456
Zahlan, N. M., p. 574
Zhang, K., p. 432